Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Currently Amended) A computer program product for performing computer graphics operations on an image represented by digital data, the product tangibly embodied in a computer-readable medium or propagated signal, the product comprising instructions operable to cause a programmable processor to:

receive a representation of a digital image, the image comprising vector objects, each of the objects being specified by control points; and

provide an editing brush for interactive editing of the image by a user, the editing brush having a size and shape defining a region of influence, the editing brush defining a displacement function over the region of influence, the displacement function having a displacement value at each position within the region of influence, each application of the editing brush being operable operating to apply a displacement function directly to each control points in point that is within the region of influence at that application of the editing brush, and not to other control points, a displacement determined according to the displacement value of the displacement function at the position of the control point in the region of influence. , whereby when the editing brush is applied by the user to the image, a local distortion of a part of the image that overlaps with the region of influence is generated.

2.   (Previously Presented) The product of claim 1, further comprising instructions to:
receive a user input specifying the shape for the region of influence.

3.   (Previously Presented) The product of claim 1, further comprising instructions to:
receive a user input specifying the size for the region of influence.

4.   (Currently Amended) The product of claim 1, further comprising instructions to:

add control point triplets to curves within the region of influence to refine ~~the~~ a complexity of the image preparatory to application of the editing brush.

5.   (Original) The product of claim 4, further comprising instructions to:

determine at each application of the editing brush whether to add control point triplets according to a user-specified value of a detail parameter.

6.   (Original) The product of claim 4 or 5, further comprising instructions to:

remove from the image those control point triplets added to refine the complexity of the image that were not displaced by application of the editing brush.

7.   (Currently Amended) The product of claim 4, further comprising instructions to:

save curve segment data of the image before application of the editing brush and replace segments of image curves that have not been distorted by the editing brush ~~are replaced~~ with their previously saved copies.

8.   (Original) The product of claim 4, further comprising instructions to:

apply a path simplification process in a piece-wise fashion to areas of curves that have been distorted.

9.   (Original) The product of claim 1, wherein the displacement function provides a smooth falloff to zero influence at the limit of the region of influence.

10.   (Original) The product of claim 1 or 2, further comprising instructions to:

determine a continuity constraint for each anchor point in the region of influence before the displacement function is applied; and

ensure that each anchor point in the region of influence satisfies the continuity constraint after the editing brush is applied.

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11. (Original) The product of claim 1 or 2, wherein each control point is either an anchor point or a tangent handle, the product further comprising instructions to:

  determine a continuity constraint in the region of influence for each anchor point that has at least one adjacent tangent handle also in the region of influence, the continuity constraint being determined before the displacement function is applied; and

  ensure that the continuity constraint for each such anchor point is satisfied after the editing brush is applied.

12. (Original) The product of claim 1, wherein a parameter of the displacement function is a trajectory of the editing brush as applied by the user.

13. (Original) The product of claim 1, wherein the displacement function defines a vector field of displacements over the region of influence.

14. (Original) The product of claim 13, wherein a trajectory of the editing brush as applied by the user determines a rotational orientation of the vector field around an axis perpendicular to an image plane.

15. (Original) The product of claim 1, further comprising instructions to implement a simplify editing brush, comprising instructions to:

  smooth details of curves; and

  remove superfluous control points.

16. (Original) The product of claim 15, wherein the instructions to smooth comprise instructions to:

  move control points of a curve in the region of influence towards the overall sweep of the curve.

17. (Original) The product of claim 15, wherein the instructions to remove control points comprise instructions to:

  remove control points at a rate determined by the user.

18.   (Original) The product of claim 1, wherein the displacement function defines a swirl effect.

19.   (Original) The product of claim 1, wherein the displacement function defines a warp effect.

20.   (Original) The product of claim 1, wherein the displacement function defines an exhale effect.

21.   (Original) The product of claim 1, wherein the displacement function defines an inhale effect.

22.   (Original) The product of claim 1, wherein the displacement function defines a scallop effect.

23.   (Original) The product of claim 1, wherein the displacement function defines a crystallize effect.

24.   (Original) The product of claim 1, wherein the displacement function defines a wrinkle effect.

25.   (Cancelled)

26.   (Cancelled)

27.   (Currently Amended) A method for performing computer graphics operations on an image represented by digital data, comprising:

receiving a representation of a digital image, the image comprising vector objects, each of the objects being specified by control points; and

providing an editing brush for interactive editing of the image by a user, the editing brush having a region of influence that has a size and shape defining a region of influence, the editing brush defining a displacement function over the region of influence, the displacement function having a displacement value at each position within the region of influence, each application of the editing brush being operable operating to apply a displacement function directly to each control point points that is within the region of influence at that application of the editing brush, and not to other control points, a displacement determined according to the displacement value of the displacement function at the position of the control point in the region of influence, whereby when the editing brush is applied by the user to the image, a local distortion of a part of the image that overlaps with the region of influence is generated.

28.   (Previously Presented) The method of claim 27, further comprising:
receiving a user input specifying the shape for the region of influence.

29.   (Previously Presented) The method of claim 27, further comprising:
receiving a user input specifying the size for the region of influence.

30.   (Currently Amended) The method of claim 27, further comprising:
adding control point triplets to curves within the region of influence to refine the a complexity of the image preparatory to application of the editing brush.

31.   (Previously Presented) The method of claim 30, further comprising:
determining at each application of the editing brush whether to add control point triplets according to a user-specified value of a detail parameter.

32.   (Previously Presented) The method of claim 30 or 31, further comprising:

removing from the image those control point triplets added to refine the complexity of the image that were not displaced by application of the editing brush.

33.   (Currently Amended) The method of claim 30, further comprising:

saving curve segment data of the image before application of the editing brush and replace segments of image curves that have not been distorted by the editing brush ~~are replaced~~ with their previously saved copies.

34.   (Previously Presented) The method of claim 30, further comprising:

applying a path simplification process in a piece-wise fashion to areas of curves that have been distorted.

35.   (Previously Presented) The method of claim 27, wherein the displacement function provides a smooth falloff to zero influence at the limit of the region of influence.

36.   (Previously Presented) The method of claim 27 or 28, further comprising:

determining a continuity constraint for each anchor point in the region of influence before the displacement function is applied; and

ensuring that each anchor point in the region of influence satisfies the continuity constraint after the editing brush is applied.

37.   (Previously Presented) The method of claim 27 or 28, wherein each control point is either an anchor point or a tangent handle, further comprising:

determining a continuity constraint in the region of influence for each anchor point that has at least one adjacent tangent handle also in the region of influence, the continuity constraint being determined before the displacement function is applied; and

ensuring that the continuity constraint for each such anchor point is satisfied after the editing brush is applied.

38.   (Previously Presented) The method of claim 27, wherein a parameter of the displacement function is a trajectory of the editing brush as applied by the user.

39.   (Previously Presented) The method of claim 27, wherein the displacement function defines a vector field of displacements over the region of influence.

40.   (Previously Presented) The method of claim 39, wherein a trajectory of the editing brush as applied by the user determines a rotational orientation of the vector field around an axis perpendicular to an image plane.

41.   (Previously Presented) The method of claim 27, further comprising implementing a simplify editing brush, including:

smoothing details of curves; and

removing superfluous control points.

42.   (Previously Presented) The method of claim 41, wherein smoothing comprises:

moving control points of a curve in the region of influence towards the overall sweep of the curve.

43.   (Previously Presented) The method of claim 41, wherein removing control points comprises:

removing control points at a rate determined by the user.

44.   (Previously Presented) The method of claim 27, wherein the displacement function defines a swirl effect.

45.   (Previously Presented) The method of claim 27, wherein the displacement function defines a warp effect.

46.   (Previously Presented) The method of claim 27, wherein the displacement function defines an exhale effect.

47.   (Previously Presented) The method of claim 27, wherein the displacement function defines an inhale effect.

48.   (Previously Presented) The method of claim 27, wherein the displacement function defines a scallop effect.

49.   (Previously Presented) The method of claim 27, wherein the displacement function defines a crystallize effect.

50.   (Previously Presented) The method of claim 27, wherein the displacement function defines a wrinkle effect.

51.   (Cancelled)

52.   (Cancelled)